Institute for 21st Century
Business Series No. 3

SURVEY OF WHOLESALERS HANDLING FISH IN CUYAHOGA AND SUMMIT COUNTIES, OHIO

Leonard J. Konopa

INSTITUTE FOR 21st CENTURY BUSINESS

CENTER FOR BUSINESS AND ECONOMIC RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
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FOREWORD

Research is being conducted under a Sea Grant Program at Kent State University* to examine the marketing and physical distribution of fish and fish products into the Midwest. This study reports the results of a survey made of wholesalers in Cuyahoga and Summit Counties, Ohio, and is the second of a series of reports dealing with members of the distribution channel. The first report deals with the operation of the retailers in the two counties (published January, 1973).

Throughout the entire research project emphasis is on the marketing of fresh fish. It is necessary, however, to obtain information in regard to frozen and even canned fish, since their marketing has a direct impact on the marketing and physical distribution of fresh fish.

Assisting Leonard J. Konopa, co-principal investigator, on this particular study, were: J. Stephen Kelly, Charles W. Lamb, Jr., Suzanne E. Thom, and Daniel F. Twomey. These doctoral students aided in the interviews with the wholesalers and observed their practices.

This report should prove useful to members of the fishing industry, students of marketing, and wholesalers, since it is one of the few studies dealing with this member of the distribution channel.

Donald F. Mulvihill
Co-Principal Investigator

*NOAA 2-35364, Application of Computer Technology and Advanced Physical Distribution Techniques to Seafood Marketing.

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I. NATURE OF THE SURVEY

In the Fall of 1970, Kent State University received a grant from the National Science Foundation to analyze (a) the market for fish in the Midwest, and (b) the channels of distribution for fresh fish. An exploratory survey among retailers and wholesalers in a two-county area was conducted from April through August, 1971, as the initial undertaking of this project. The results of the wholesalers survey are summarized in this report. The data are presented in the same order and follow the same outline utilized in the previous monograph entitled "Survey of Selected Retail Food Stores Handling Fish in Cuyahoga and Summit Counties, Ohio."

II. WHOLESALER SURVEY METHODOLOGY

An initial list of fish and seafood wholesalers was obtained from the yellow pages of the Akron and Vicinity Telephone Directory (Summit County, Ohio), as well as the Cleveland Metropolitan Area Telephone Directory (Cuyahoga County, Ohio). Names of other independent wholesalers in Summit and Cuyahoga Counties not contained in the yellow pages were found subsequently through interviews with retailers. The chain store warehouses that provided fish for their retail chain outlets in the retail survey also were added to the list. Finally, three establishments originally classified as retailers were transferred to the wholesaler category after interviews with their proprietors revealed their wholesale sales constituted more than 50 per cent of their total sales volume. The names of 28 wholesalers were eventually secured in this manner.

Unlike the retailer survey in which a random sample of retailers was interviewed, all 28 wholesalers in Summit and Cuyahoga Counties were contacted. A copy of the wholesaler questionnaire and a cover letter were mailed to the wholesalers. The letter indicated the nature of the survey and explained that an interviewer would contact the recipient by telephone to arrange a mutually convenient time for a personal interview. A structured questionnaire was utilized in all personal interviews. Like the retailer questionnaire, the wholesaler document was pretested during the Winter Quarter, 1971. Usable replies were obtained from 25 wholesalers. Three refused to furnish data, saying the information was confidential.

III. DESCRIPTION AND CLASSIFICATION OF THE WHOLESALERS

Since the wholesalers in Summit County are located primarily in Akron, Ohio, and those in Cuyahoga County are based essentially in Cleveland, Ohio, they are identified by the prefix A for Akron wholesalers and C for Cleveland wholesalers. Fifteen of the 25 wholesalers who completed usable questionnaires are situated in Cleveland, while 10 wholesalers are Akron establishments.

The wholesalers are categorized further throughout this report as major line or minor line distributors. A major line wholesaler's sale of fish ranges from 20 to 100 per cent of his total annual sales volume. Conversely, firms whose sales represent less than 20 per cent of their annual sales volume are classified as minor line wholesalers. Overall, 13 of the 25 wholesalers are major line distributors. Nine of these are Cleveland firms, while four are located in Akron. The 12 minor line wholesalers are split evenly, with six firms in Akron and six in Cleveland. Sixty per cent of the Cleveland wholesalers are major line distributors and 40 per cent are minor line wholesalers. The proportions are reversed for the Akron wholesalers, with 40 per cent identified as major line distributors and 60 per cent as minor line wholesalers.

IV. FORMS OF FISH HANDLED BY WHOLESALERS

A. Definitions

The different forms of fish were carefully defined and categorized on the questionnaire itself to reduce the likelihood of variances in wholesalers' responses arising from using identical terms in different context. Fin fish were identified as cod, halibut, perch, and similar species, whereas shell fish encompassed such varieties as clams, crabs, lobsters, oysters, shrimp, and scallops.

Fresh fin and shell fish are fish that may have been iced but not frozen. Frozen fish, of course, are fish that have been preserved by deep freezing. Processed fin fish have been headed, cleaned, and filleted, while processed shell fish have been deveined or shelled.

Prepared fish are fin or shell fish that have been processed as well as cooked and/or battered. Fish sticks, breaded fillets, breaded shrimp, and deep fried crab cakes are examples of prepared fish.

Canned fish includes all forms of fin and shell fish preserved in canned form. Canned salmon, tuna, mackerel, oysters, and pickled herring are typical forms of canned fish.

B. Forms of Fish Handled by Major Line Wholesalers

Data concerning the forms of fish handled by the wholesalers are presented in Table 1. The tables described in this report are placed at the end of each section to enable the reader to locate them expeditiously for additional analysis, as well as to eliminate the distraction caused by numerous tables interspersed throughout the discussion.

Table 1 shows that all 13 of the major line wholesalers handle frozen fresh water fish in addition to frozen ocean fin and shell fish. Ten of the 13 also handle fresh ocean fin and shell along with fresh inland water fish. Another way of interpreting these data is to point out that only three of the 13 major line wholesalers specialize solely in frozen fish. Lastly, nine of the 13 distributors carry canned fish. Among the four wholesalers not carrying canned fish are three fresh-frozen line establishments and one frozen line wholesaler.

C. Forms of Fish Handled by Minor Line Wholesalers

In sharp contrast with the major line wholesalers, just one of the 12 minor line wholesalers handles fresh fish. On a proportional basis, the figures show 78 per cent of the major line wholesalers handle fresh fish in their product mix, whereas eight per cent of the minor line wholesalers do so. Another minor line wholesaler, moreover, handles neither fresh nor frozen fish, but supplies only canned fish to his customers. The most popular form of fish among the minor line distributors is frozen fish. Frozen ocean fin and shell fish are carried by 11 of the 12 minor line establishments. Five of these also handle frozen fresh water fish along with the ocean species. Turning to canned fish, Table 1 indicates that eight of the 12 minor line wholesalers stock this product. Proportionately, nearly 70 per cent of the major line as well as minor line distributors handle canned fish.

D. Summary

Recapitulating the findings, it is clear that frozen fish is the form most widely handled by wholesalers. All of the major line establishments stock frozen fish, as do 11 of the 12 minor line wholesalers. The next most widely handled form of fish is canned fish, with approximately 70 per cent of the wholesalers in each group stocking this product. Finally, the form of fish handled least is fresh fish. Fresh fish, moreover, is clearly a product offering of major line rather than minor line wholesalers, since 10 of 13 major distributors handle fresh fish, while just one of the 12 minor line distributors carry fresh fish.

TABLE 1
FORM OF FISH HANDLED BY AKRON/CLEVELAND WHOLESALERS

Number Handling as Major or Minor Line	Form of Fish Handled: Fresh Ocean Fin	Fresh Ocean Shell	Fresh Fresh Water	Frozen Ocean Fin	Frozen Ocean Shell	Frozen Fresh Water	Canned
Major Line (20% ore more in sales) [N=13]							
A-1	X	X	X	X	X	X	-
A-2	X	X	X	X	X	X	X
A-3	X	X	X	X	X	X	X
A-4	X	X	X	X	X	X	X
C-1	-	-	-	X	X	X	-
C-2	X	X	X	X	X	X	X
C-3	-	-	-	X	X	X	X
C-4	X	X	X	X	X	X	X
C-5	X	X	X	X	X	X	X
C-6	-	-	-	X	X	X	X
C-7	X	X	X	X	X	X	X
C-8	X	X	X	X	X	X	-
C-9	X	X	X	X	X	X	-
Subtotal	10	10	10	13	13	13	9
Minor Line [N-12]							
A-5	-	-	-	X	X	-	-
A-6	-	-	-	X	X	-	X
A-7	-	-	-	X	X	-	X
A-8	-	-	-	X	X	-	X
A-9	-	-	-	-	-	-	X
A-10	-	-	-	X	X	X	X
C-10	X	X	X	X	X	X	X
C-11	-	-	-	X	X	-	-
C-12	-	-	-	X	X	-	-
C-13	-	-	-	X	X	X	X
C-14	-	-	-	X	X	X	-
C-15	-	-	-	X	X	X	X
Subtotal	1	1	1	11	11	5	8
GRAND TOTAL	11	11	11	24	24	18	17

Source: Survey Data.

V. PERCENTAGE OF WHOLESALERS' SALES BY FORM OF FISH HANDLED

The proportion of each wholesaler's sales by form of fish handled is given in Table 2. Two factors are readily apparent when examining Table 2. The first is the number of nonrespondents and/or interviewees who are unable to break down their sales by form of fish handled. Among the major line wholesalers, eight firms responded. Five refused to reply or did not know what proportion of their sales are derived from each variety of fish sold. The number of replies from minor line wholesalers, however, is better, with nine of the 12 respondents providing this information.

The second factor readily apparent from Table 2 is the wide dispersion in percentage of each firm's sales by form of fish handled, as well as by the different types of fish actually sold by each respondent. To overcome this problem and to provide a basis for comparison, a composite average percentage of sales by form of fish was calculated for the major and the minor line wholesalers. The composite percentage of sales pattern was obtained by totaling the percentage sales for each form of fish and dividing by total number of major or minor line respondents in their respective groups.

A. Major Line Wholesalers' Sales

The first view of form of fish sales is the significance of whole or processed versus prepared and canned fish. Whole or processed frozen fin and shell fish each account for 22 per cent of major line wholesalers' composite sales, or 44 per cent of total sales. Whole or processed fresh fin or shell sales are 17 and 16 per cent, respectively, for 33 per cent of total sales. Whole or processed fish in fresh and frozen form account for 77 per cent of total sales. Prepared fish represent 13 per cent of total sales. Prepared frozen fin and shell sales are seven and five per cent, respectively, while the sales of prepared fresh fin and shell are just over one per cent. Canned fish constitutes the remaining 10 per cent of total sales.

The second view of form of fish sales is a comparison of frozen versus fresh and canned fish sales. Fifty-six per cent of total sales are frozen fin and shell fish; 34 per cent are fresh fin and shell, and the last 10 per cent, as above, are canned fish.

B. Minor Line Wholesalers' Sales

The whole or processed fish sales of minor line wholesalers run 16 per cent for fin fish and 23 per cent for shell fish on a composite sales basis. Prepared fin account for 29 per cent, while prepared shell represent 21 per cent of total sales. Sales of canned fish are 11 per cent of total sales. Consolidation of these figures shows 39 per cent of total sales are in the form of whole or processed fish; 50 per cent are prepared fish and 11 per cent canned fish.

The breakdown by frozen, fresh, and canned forms of fish sales indicates 74 per cent of total composite sales are frozen fish; five per cent are fresh fish; and 11 per cent of sales are canned fish.

C. Summary

The comparison of composite or typical sales by form of fish of major and minor line wholesalers indicates that major line wholesalers are more likely to derive the major portion of their sales from whole or processed fish, while the minor line wholesalers rely on prepared fish. The data further indicate both groups obtain most of their sales from frozen rather than fresh fish, the minor line wholesalers much more so than the major line distributors. The sales of canned fish for typical major and minor line wholesalers approximate 10 per cent of composite sales.

Due to the wide disparity of form of fish handled, as well as differences in product emphasis, composite sales profile for each group was developed for comparison. Although the composite profiles are helpful in deriving the more obvious generalizations, the reader is urged to examine Table 2 carefully for each respondents actual sales by form of fish.

TABLE 2

PERCENTAGE OF WHOLESALERS SALES BY FORM OF FISH HANDLED

	FORM OF FISH								
	Whole or Processed				Prepared				
Wholesalers	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned
Major Line [N=13]									
A-1	15%	5%	50%	18%	4%	1%	2%	5%	-
A-2	X	X	X	X	X	X	X	X	X
A-3	X	X	X	X	X	X	X	X	X
A-4	43	9	21	10	-	-	4	10	3
C-1	-	-	30	40	-	-	30	-	-
C-2	25	20	35	10	-	-	-	10	-
C-3	-	-	18	6	-	-	8	3	65
C-4	X	X	X	X	X	X	X	X	X
C-5	42	28	6	3	5	2	5	4	5
C-6	-	-	10	85	-	-	-	-	5
C-7	X	X	X	X	X	X	X	X	X
C-8	10	66	5	2	-	-	6	11	-
C-9	X	X	X	X	X	X	X	X	X
Composite % Sales[1]	17%	16%	22%	22%	1%	1/3%	7%	5%	10%

Source: Survey Data.

X = Not Available

[1]Composite or average percentage of sales is derived by totaling the percentage of sales in each column and dividing by total number of respondents, i.e., eight for major line wholesalers, and nine for minor line wholesalers.

TABLE 2

PERCENTAGE OF WHOLESALERS SALES BY FORM OF FISH HANDLED

Wholesalers	FORM OF FISH								
	Whole or Processed				Prepared				
	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned
Minor Line									
A-5	-	-	-	12%	-	-	50%	38%	-
A-6	-	-	37%	10	-	-	12	40	1%
A-7	-	-	37	8	-	-	12	40	2
A-8	-	-	X	X	-	-	X	X	X
A-9	-	-	-	-	-	-	-	-	100
A-10	-	-	7	6	-	-	75	10	2
C-10	25%	15%	20	35	-	-	-	5	X
C-11	-	-	15	35	-	-	15	35	-
C-12	-	-	-	82	-	-	10	8	-
C-13	-	-	X	X	-	-	X	X	X
C-14	-	-	-	-	-	-	85	15	-
C-15	-	-	-	X	-	-	X	X	X
Composite % Sales[1]	3%	2%	13%	21%	-	-	29%	21%	11%

Source: Survey Data.

X = Not Available.

[1] Composite or average percentage of sales is derived by totaling the percentage of sales in each column and dividing by total number of respondents, i.e., eight for major line wholesalers and nine for minor line wholesalers.

VI. WHOLESALERS' MARKUP BY TYPES OF CUSTOMERS AND PERCENTAGE OF SALES TO RESPECTIVE GROUPS

The difference between the cost of a product to a middleman and his resale price is markup. The markups of respondent wholesalers are contained in Table 3 at the end of this section. Five types of buyers or customers are listed in Table 3. The first is the ultimate consumer, that is, the household buyer. The second and third types are restaurants (plush clubs to drive-ins), and institutions (schools, factory cafeterias, hospitals, etc.) who purchase food which they prepare and sell or serve to others. The fourth and fifth classes of customers are retail stores and other wholesalers who purchase fish to resell without final preparation before eating, although additional processing may occur. The proportion of total sales obtained from each of these groups by respective wholesalers is given in Table 4.

A. Types of Customers

Eleven of the 13 major line wholesalers responded completely or partially to the question dealing with markups to various groups of buyers. Five of the 11 sell to all five types of customers. Two more firms sell to household consumers, restaurants, institutions, and retailers, but not to other wholesalers. Similarly, two major line wholesalers sell to the first three types of customers, but do not call on retailers or other wholesalers. One firm, on the other hand, sells exclusively to retailers and wholesalers, while the remaining major line wholesaler concentrates on institutional organizations and retail stores. It is interesting to note that nine of the 11 major line wholesalers who responded to the question sell to the ultimate household consumer. Some have a retail outlet in their warehouse, while others handle such sales on an informal basis when customers walk in for fish. The data in Table 4 disclose that only three of these distributors obtain over five per cent of total sales from household consumers. Every one of the 12 minor line wholesalers disclosed full or partial information concerning types of customers and/or markups.

The customers of minor line wholesalers are somewhat different than those of major line wholesalers. First, no minor line distributor sells to household consumers. This is a reversal of the situation where nine of the 11 major line wholesalers sell to household consumers. Second, no minor line establishment sells to all consumer groups, whereas five major line wholesalers do so. Instead, there is a tendency to concentrate on supplying specific groups of customers. For example, four minor line establishments sell to restaurants and institutions, two businesses sell exclusively to restaurants, and one to retailers only. In addition, the percentage of sales to various customer groups exhibited in Table 4 clearly shows how minor line wholesalers, in contrast to major line firms, depend heavily on sales to particular customer groups. Not one major line wholesaler, for instance, does 75 per cent or more of his business with any one buying group, although nine minor line wholesalers do so.

B. Markup by Customer Groups

From the data available in Table 3, it is evident that major line wholesalers obtain a larger markup on fresh fin fish sold to ultimate household consumers than fresh fin fish sold to other types of buyers. Fresh fish sales to other wholesalers, of course, have the lowest markup. As far as major line sales to restaurants and institutions are concerned, three wholesalers have the same markup on fresh fish to both classes of buyers, while three other firms have a higher markup on sales to restaurants than to institutions. The markup on fresh fin fish sold to retail stores is the same as the institutional markup in two instances, less in one case, and higher in another. Even though fresh fin fish is used to illustrate differences in markup by customer class, the results are similar for other forms of fish. The one exception is the wholesaler of frozen fin and shell fish who assigns a uniform markup to all classes of buyers.

Five minor line wholesalers vending to restaurants and institutions have the same markup on frozen fin and shell fish to both groups, although a sixth distributor places a lower markup on sales to institutions than to restaurants. The two companies doing business with retailers and wholesalers offer their products at equally low markup to both groups. Where a firm deals with restaurants and institutions along with retail stores, the markup for retailers is generally under the restaurant/institution markup.

C. Forms of Fish

With the exception of one wholesaler, the markup on fresh fin and shell fish to household consumers is identical for both forms of fish and ranges from 20 to 35 per cent, depending on the wholesaler from whom it is purchased. The same is true for fresh fin and shell fish sold to restaurants, institutions, retailers and other wholesalers. The lone exception is the major line wholesaler who has a markup of 30 per cent on fresh fin and 25 per cent on fresh shell sold to consumers, and a 12 per cent markup for fresh fin versus 15 per cent for fresh shell going to the institutional market.

A total of 18 major and minor line wholesalers mark up frozen shell the same percentage as frozen fin, although the markups frequently vary not only by customer class but also by distributor. The two wholesalers who do not follow this policy mark up frozen fin more than frozen shellfish.

Among the reporting wholesalers handling both fresh and frozen fish, twice as many (6 of 9) have an identical markup by customer class on both forms of fish. This is contrary to expectations, since frozen fish costs less to handle in terms of direct labor processing cost, spoilage, etc.

Surprisingly, three major line and one minor line wholesalers attach the same markup to canned fish that they use for frozen fish. A majority of the firms handling canned fish, however, mark it up less than frozen fish.

The actual percentage markups given by respondents varies widely. For frozen fish purveyed to restaurants, for instance, the markups range from 10 to 25 per cent for major line wholesalers and from 10 to 27 per cent for minor line wholesalers. Comparison on a firm by firm basis, however, shows more minor line wholesalers tend to have higher markups on a particular form of fish than major line distributors.

D. Summary

A discussion of the markup policies of retail stores is simplified by the fact that retailers essentially resell their fish to household consumers. Wholesalers, however, may resell to as many as five different types of buyers, namely, household consumers, restaurants, institutions, retail food stores, and other wholesalers. The major line wholesalers ordinarily specialize less than the minor line wholesalers on the basis of buying groups to whom they sell. Not only do major line wholesalers sell to more groups of buyers than minor line wholesalers, but they also sell to household consumers.

Even though most major line wholesalers sell to household consumers, the household buyer seldom purchases at the wholesale price since the markup on sales to household consumers is higher in all cases. Wholesalers' sales to other wholesalers typically have the lowest markup. The markup on products sold to restaurants and institutions shows that two-thirds of the wholesalers mark up their products the same percentage to both groups, while one-third of those selling to both groups have a lesser markup on institutional sales than restaurant sales. Among wholesalers who sell to retail food stores as well as institutions, 55 per cent have a lower markup on retail food store sales than institutional sales. The remaining 45 per cent have the same markup on sales to both groups.

By form of fish handled, all but one wholesaler employs the same percentage markup on fresh fin fish and fresh shell fish. This is not to say that a wholesaler's markups are uniform among the different types of buyers. Instead, there is no difference in the markup between fresh fin and fresh shellfish in a given customer class for a particular wholesaler, with the exception of one distributor. Similarly, in nearly all instances the wholesalers also mark up their frozen fin fish and frozen shell fish the same percentage within each customer class. Two-thirds of the wholesalers handling both fresh as well as frozen fish mark up these products the same amount, while one-third mark up fresh fish more than frozen fish. Lastly, nearly half of the distributors selling canned fish mark it up the same percentage as frozen fish, although slightly over half mark up the canned product less than frozen fish.

TABLE 3
PERCENTAGE MARKUP TO CUSTOMER CLASSES BY FORM OF FISH

Percentage Markup by Type of Wholesaler	CUSTOMER CLASS AND FORM OF FISH																								
	Household Consumers					Restaurants					Institutions					Retailers					Wholesalers				
	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned	Fresh Fin	Fresh Shell	Frozen Fin	Frozen Shell	Canned
MAJOR LINE	[N=13]																								
A-1	35	35	35	35	--	25	25	--	25	--	22	22	22	22	--	18	18	18	18	--	15	15	15	15	--
A-2 *																									
A-3	30	25	--	25	--	20	--	15	15	--	12	15	15	15	--	15	15	15	*	--	--	--	--	--	--
A-4	25	25	15	15	15	20	20	10	10	10	20	20	10	10	10	20	20	10	10	10	--	--	--	--	--
C-1	--	--	12	6	--	--	--	12	6	--	--	--	12	6	--	--	--	12	6	--	--	--	12	6	--
C-2	25	25	25	25	*	14	14	14	*	10	10	10	10	10	*	10	10	10	10	*	8	8	8	8	*
C-3	--	--	--	--	--	--	--	--	--	--	--	--	*	*	*	--	--	*	*	*	--	--	*	*	*
C-4*																									
C-5*																									
C-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	32	22	*	--	--	22	12	*
C-7	25	25	25	25	15	15	15	15	15	15	15	15	15	15	15	--	--	--	--	--	--	--	--	--	--
C-8	20	20	20	20	20	20	10	10	10	10	10	10	10	10	10	--	--	--	--	--	--	--	--	--	--
C-9	23	23	23	23	--	*	*	*	*	--	*	*	*	*	--	*	*	*	*	--	*	*	*	*	--
MINOR LINE	[N=12]																								
A-5	--	--	--	--	--	--	--	4	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A-6	--	--	--	--	--	--	--	15	15	--	--	--	15	15	--	--	--	5	5	2	--	--	5	5	5
A-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	5	2	--	--	5	5	5
A-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	6	2	--	--	--	--	--
A-9	--	--	--	--	--	--	--	--	--	*	--	--	--	--	--	--	--	--	--	*	--	--	--	--	--
A-10	--	--	--	--	--	--	--	--	--	--	--	--	10	10	5	--	--	20	20	5	--	--	--	--	--
C-10	--	--	--	--	--	27	27	27	27	*	27	27	27	27	*	--	--	--	--	--	--	--	--	--	--
C-11	--	--	--	--	--	--	--	20	20	--	--	--	15	15	*	--	--	--	--	--	--	--	--	--	--
C-12	--	--	--	--	--	--	--	10	10	--	--	--	10	10	--	--	--	--	--	--	--	--	--	--	--
C-13	--	--	--	--	--	--	--	20	20	*	--	--	20	20	*	--	--	--	--	--	--	--	--	--	--
C-14	--	--	--	--	--	--	--	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
C-15	--	--	--	--	--	--	--	15	15	5	--	--	15	15	5	--	--	10	10	5	--	--	--	--	--

* No Answer
Source: Survey Data.

TABLE 4

PERCENTAGE OF SALES TO VARIOUS CUSTOMER GROUPS

		Customer Groups			
Wholesalers	Customers	Restaurant	Institutions	Retailers	Wholesalers
Major Line					
A-1	1%	3%	30%	65%	1%
A-2 No Answer					
A-3	45%	15%	10%	30%	-
A-4 No Answer					
C-1	3%	5%	10%	26%	56%
C-2	5%	40%	25%	10%	20%
C-3	-	-	5%	60%	35%
C-4 No Answer					
C-5	5%	70%	-	25%	-
C-6 No Answer					
C-7 No Answer					
C-8	37%	51%	12%	-	-
C-9	13%	40%	25%	20%	12%
Minor Line					
A-5	-	100%	-	-	-
A-6	-	-	5%	95%	-
A-7 No Answer					
A-8	-	-	-	100%	-
A-9	-	20%	-	80%	-
A-10	-	-	10%	90%	-
C-10	-	25%	75%	-	-
C-11	-	50%	50%	-	-
C-12	-	82%	18%	-	-
C-13 No Answer					
C-14	-	100%	-	-	-
C-15	-	2%	5%	93%	

Source: Survey Data.

VII. SOURCES OF SUPPLY

The sources of supply are categorized in Table 5 for major and minor line wholesalers on the basis of: form of fish (fresh or frozen, fin or shell, ocean or lake) and foreign or domestic sources. The sources are identified by respondents in various ways. They give names of cities, states, regions, provinces, or foreign countries. The sources listed in Table 5, consequently, are a mixture of geographic terms ranging from cities to countries.

A. Major Line Wholesalers

The 13 major line wholesalers identify domestic sources 84 times and foreign sources 50 times. This is an average of six domestic and four foreign suppliers per distributor. By form of fish, however, major line wholesalers report nearly twice as many geographic sources from which they obtain fresh shell fish than fresh ocean fin fish. Boston, by far, is the most frequently mentioned source of fresh ocean fin fish, followed by Baltimore, Gloucester, New York, and Florida. Boston again leads the list for fresh shell, with Baltimore, Virginia, and New Jersey close behind. The latter fresh shell fish sources, in turn, are followed by seven additional sources shown in Table 5. Five major line distributors import fresh ocean fin from Nova Scotia and an unspecified Canadian source, while only one firm imports fresh shell fish from Canada.

Frozen ocean fin also come primarily from Boston and seven lesser mentioned domestic sources; but foreign sources, especially Nova Scotia, Canada (not identified), and Denmark, for frozen ocean fin are equally as important as the domestic sources. Turning to domestic sources of frozen shell fish, six major line wholesalers list Texas. Three distributors mention Virginia, while Alaska, Florida, and Boston are each identified twice. Six other domestic sources are reported once. Like frozen ocean fin fish, foreign sources of frozen shell are as significant as domestic sources. Mexico, Australia, Holland, Japan, and New Zealand are mentioned more frequently than Denmark, Greenland, or Nova Scotia as sources for frozen shell fish.

Fresh water frozen fish, categorized as lake fin in Table 5, is obtained mostly from Canadian sources (primarily Canada's Freshwater Fish Marketing Corporation, located in Winnipeg, Manitoba). Cleveland and Philadelphia are the only two domestic fresh water frozen fish sources given. Unfrozen lake fin, on the other hand, comes to major line wholesalers from domestic sources along Lake Erie (not identified), Cleveland, Detroit, and Chicago. An equal number of respondents also purchase fresh lake fin from Canada. The dominance of Canada as the supplier of fresh fin fish, especially in frozen form, is clearly evident from these statistics.

The pattern for canned fish is opposite to that for fresh fish. That is to say, domestic sources outrun foreign sources by a three to one ratio among major line wholesalers. The diversity of domestic sources for canned fish listed by major line wholesalers is also readily apparent. California, for instance, is mentioned twice, while Baltimore, Boston, Cleveland, Florida, New York, Seattle, and Virginia are all reported once. The foreign sources are given as Norway, Portugal, and Puerto Rico.

B. Minor Line Wholesalers

The minor line wholesalers identify domestic sources 51 times and foreign sources 24 times, for an average of four domestic and two foreign suppliers per firm. None of the 12 minor line wholesalers secure either fresh ocean fin or fresh shell from foreign sources. Four domestic sources for fresh ocean fin, however, are identified. They are Alabama, Boston, New York, and Philadelphia. Similarly, two sources of fresh shell are mentioned: Mississippi and Virginia.

The domestic pattern for frozen ocean fin and shell fish is opposite to that for fresh fish. There are nine domestic sources for frozen shell and five for frozen ocean fin. Gloucester is given as the domestic source of frozen ocean fin by three minor line wholesalers, while Boston, Mississippi, New York, and Philadelphia are each mentioned once. Five firms say they get frozen shell from Florida. Four minor line wholesalers mention Texas, while three give Gloucester as their source of frozen shell fish. Other frozen shell sources reported are Boston, Chicago, Louisiana, New Jersey, New York, and Philadelphia. The only foreign sources for frozen ocean fin are Nova Scotia and Canada (not identified). Each is mentioned three times. Frozen shell fish, on the other hand, came from five foreign sources. Ranked according to number of times reported are Mexico, South Africa, Australia, Japan, and Puerto Rico.

Lake fin fish (fresh water fin) in fresh form come from a Cleveland source domestically, or from Winnipeg as the foreign source of fresh lake fin. Frozen lake fin is secured domestically from Lake Erie sources (three mentions), Cleveland (two mentions), and Detroit (one mention). The foreign source of frozen lake fin is given as Winnipeg (three mentions).

Minor line wholesalers obtain their canned fish primarily from domestic sources. California is reported eight times, Seattle three times, and Maine once. The foreign source for canned fish is Norway, with five mentions.

C. Comparison of Major and Minor Line Wholesalers

Like the previous tables, the data in Table 5 reflect the fact that major line wholesalers rather than minor line wholesalers are the distributors of fresh ocean fin and shell fish. The major line wholesalers procure their fresh ocean fin from a total of eight domestic and foreign sources, whereas minor line distributors use only four domestic and no foreign suppliers. Major line wholesalers also reach out to 11 different domestic and Canadian sources for their fresh shell fish, whereas minor line wholesalers rely solely on two domestic sources.

TABLE 5

SOURCES OF SUPPLY

U. S. SOURCES	MAJOR LINE WHOLESALERS							MINOR LINE WHOLESALERS							TOTAL
	FRESH			FROZEN				FRESH			FROZEN				
	Ocean Fin	Ocean Shell	Lake Fin	Ocean Fin	Ocean Shell	Lake Finned	Can-	Ocean Fin	Ocean Shell	Lake Fin	Ocean Fin	Ocean Shell	Lake Finned	Can-	
Ala.(Mobile)	1							1							2
Alaska					2										2
Baltimore	2	3		1	1		1								8
Boston	7	4		5	2		1	1			1	1			22
California							2							8	10
Chicago			1		1							1			3
Cleve./Akron			2			1	1			1			2		7
Detroit			1										1		2
Fla.(Tampa, Miami,Pensa-cola)	1	1		2	2			1				5			12
Gloucester	1			2							3	3			9
Lake Erie			2										3		5
Louisiana		1			3							2			6
Md.Chesa-peakeBay)		1			1										2
Maine		1			1									1	3
Mississippi					1				1		1				3
New Jersey		2										1			3
NY/Long Is.	1	1					1	1			1	1			6
Philadelphia				1	1	1		1			1	1			6
Seattle				1			1							3	5
Wash.,D.C.		1		1											2
Texas(Galves-ton,Br'ns'v'l)		1			6							4			11
Va.(Severins, N'folk,Chicochik)		3		1			1		1						6
SUBTOTAL	13	19	6	14	21	2	9	4	2	1	7	19	6	12	135

TABLE 5

SOURCES OF SUPPLY

FOREIGN SOURCES	MAJOR LINE WHOLESALERS							MINOR LINE WHOLESALERS							TOTAL
	FRESH			FROZEN				FRESH			FROZEN				
	Ocean Fin	Ocean Shell	Lake Fin	Ocean Fin	Ocean Shell	Lake Finned	Can-ned	Ocean Fin	Ocean Shell	Lake Fin	Ocean Fin	Ocean Shell	Lake Finned	Can-ned	
Australia					2							1			3
Canada (not identified)	1	1	1	3		3					3				12
Denmark				3	1										4
Greenland					1										1
Holland					2										2
Japan				1	2							1			4
New Zealand					2										2
Norway				1			1							5	7
Nova Scotia	4			3	1						3				11
Mexico					3							4			7
Portugal							1								1
Puerto Rico							1					1			2
S. Africa												2			2
S. America					3										3
Winnipeg			5			4				1			3		13
SUBTOTAL	5	1	6	11	17	7	3	0	0	1	6	9	3	5	74
GRAND TOTAL	18	20	12	25	38	9	12	4	2	2	13	28	9	17	209

Source: Survey Data.

VIII. TRENDS IN WHOLESALERS' FISH SALES [1966-1971]

A. Fresh Fish

Ten major line and one minor line wholesalers handle fresh fish as shown in Table 6. Five of these 11 wholesalers say their fresh fish sales have increased in the past 5 years (1966-1971). Six of the 11 report a decline in sales. Several of the latter respondents pointed out, however, that even though they are selling less fresh fish, they are getting more for it.

B. Frozen Fish

Eleven of the 12 minor line wholesalers are distributors of frozen fish. Everyone in the minor line group has experienced an increase in frozen fish sales. All 13 major line wholesalers handle frozen fish. Eleven of the 13 also have experienced an increase in sales, while two firms report a decline in frozen fish sales.

C. Canned Fish

The sales picture for canned fish encompasses a full range of responses contained in the questionnaire. Five of the 12 wholesalers who replied to this question say there is no change in canned fish sales, and several note that although sales declined during the mercury scare, they have recovered in the meantime. Four other wholesalers indicate their sales have fallen off and have not fully recovered. Lastly, three of the 12 firms say their canned fish sales trends have not only increased, but are continuing to do so.

D. Summary

The sales trend for frozen fish from 1966 to 1971 may be depicted as an upward moving trend line, with 22 of the 24 wholesalers reporting rising sales. The sales trend for fresh fish, on the other hand, appears to be a declining line for total pounds sold, although total revenue may be increasing somewhat since price per pound was substantially higher in 1971 than it was in 1966. Two-thirds of the reporting firms state that canned fish sales have either exceeded or returned to the plateau they had attained prior to the mercury scare that occurred in the Fall of 1970. These trends are presented on an aggregate basis because minor line wholesalers usually report the same trends as major line wholesalers.

TABLE 6

TRENDS IN WHOLESALERS' FISH SALES [1966-1971]

Form of Fish		Number of Wholesalers Major Line	Minor Line	Total
Fresh Fish				
+ Sales		5	0	5
No Change		0	0	0
- Sales		5	1	6
	Number Handling	10	1	11
Frozen Fish				
+ Sales		11	11	22
No Change		0	0	0
- Sales		2	0	2
	Number Handling	13	11	24
Canned Fish				
+ Sales		2	1	3
No Change		3	2	5
- Sales		2	2	4
No Reply		2	3	5
	Number Handling	9	8	17

Source: Survey Data.

IX. WHOLESALERS' EXPLANATIONS OF SALES TRENDS

A. Explanations of Sales Increases

The wholesalers' explanations of their sales trends are grouped in this section as either supply or demand factors. On the demand side, wholesalers with greater fresh fish sales attribute the increase in sales to population growth; a rise in the income level of most families; greater recognition of fish's nutritional content; and the number of people who are weight-watchers. On the supply side, they attribute the rise in fresh fish sales to two facts: there are fewer wholesalers now supplying the product, and restaurants are emphasizing fresh fish more often as a menu item.

The demand for frozen fish is up, according to wholesalers, because it is easy to prepare; it is cheaper than most meat or fresh fish; the population has grown; income has increased; people have recognized the nutritional value of fish; and the number of weight-watchers has risen. Turning to supply factors, wholesalers emphasize the fact that there is a better supply of frozen fish than fresh fish available, and the quality of frozen fish is equal to or better than fresh fish. They also attribute considerable growth to special promotional campaigns, as well as to the drive-ins and fish houses (such as Arthur Treacher's) that now supply the product to consumers.

Only one respondent comments on the increase in canned sales. He attributes his rise in canned sales to special promotional campaigns for canned fish.

B. Explanations of Sales Decreases

Wholesalers reporting a decline in fresh fish sales think the demand is down primarily because of its increase in price and consumers' fear of pollution. Other explanations include the relaxing of dietary requirements by the Pope and the fact that people have turned to frozen fish. On the supply side, two wholesalers indicate fresh fish consumption is down in keeping with the lesser supply available.

Interestingly, there are only two wholesalers who report a decline in frozen fish sales. Both say the public's fear of pollution and relaxation of religious dietary requirements are the demand factors responsible for their drop in sales.

The four wholesalers whose canned sales have diminished attribute the decline to increased price, pollution, and the Papal edict concerning fish consumption.

C. Summary

Factors contributing to the increase in fresh fish sales are generally demand factors, whereas the increase in frozen fish sales are more evenly divided between supply and demand variables. Any decline reported in the sale of fresh, frozen, or canned fish, on the other hand, is generally blamed on the fear of pollution, the Pope's relaxation of of dietary requirements, and increased price. All of these factors influence demand negatively.

TABLE 7

WHOLESALERS' EXPLANATIONS OF SALES TRENDS

Reasons given by wholesalers for:	Number of Times Mentioned for Each Form of Fish			
	Fresh	Frozen	Canned	Total
A. Increase in Sales				
Others went out of business	2			2
Greater offerings by restaurants	1			1
Rise in income of population	1	1		2
General population growth	2	4		6
More weight watchers	1	1		2
Recognition of fish's nutrition	1	2		3
Cheaper than meat or fresh fish		6		6
Better supply and quality available		6		6
Easy to prepare		8		8
Growth of drive-ins offering fish		1		1
Company expanded		1		1
Special promotional campaigns		5	1	6
No reason given		2	2	4
B. Decline in Sales				
Lesser supply available	2			2
People have turned to frozen fish	1			1
Price increase	3		2	5
Fear of pollution	3	2	1	6
Papal dietary edict	2	2	1	5
No reason given				
C. No Change in Sales				
No reason given			5	5

Source: Survey Data.

X. WHOLESALERS' VIEWS ON PREFERENCES FOR FRESH OR FROZEN FISH

A. Major Line Wholesalers

Major line wholesalers split into two equal sized groups concerning the form of fish they prefer to handle. Six wholesalers prefer fresh; six prefer frozen; and one says both forms. Beginning with those who prefer handling frozen fish, four of the six report that their customers (restaurants, institutions, retailers and/or other wholesalers) also prefer distributing frozen fish. One of the remaining two wholesalers who prefers frozen fish indicates everyone but retailers would rather handle frozen fish, while the second remaining wholesaler thinks other wholesalers want fresh instead of frozen fish.

Opinions as to the preferences of resellers are not as uniform among the major line wholesalers who personally prefer offering fresh fish. One of the six wholesalers in this category is of the opinion that all resellers (restaurants, institutions, retailers and other wholesalers) would rather offer fresh than frozen fish. Two additional wholesalers think restaurants and institutions prefer fresh fish, but other wholesalers are inclined to emphasize either frozen fish or both fresh and frozen forms. The fourth wholesaler indicates restaurants want both forms of fish, while the fifth wholesaler believes retailers desire fresh fish and restaurants want frozen. The six wholesalers categorized as the second group think restaurants and institutions prefer either form, depending on the type of food service they offer, while retailers and other wholesalers prefer to handle frozen fish.

The remaining major line wholesaler, who says he has no preference, believes restaurants and retailers want fresh fish in contrast to institutions and other wholesalers who generally prefer offering frozen fish.

B. Minor Line Wholesalers

Ten of the 12 minor line wholesalers responded to this question. All ten report they personally prefer handling frozen fish. All ten, moreover, also think restaurants desire frozen rather than fresh fish. Six of the ten respondents sell to institutions. Five of the six think institutions prefer handling frozen fish, while the sixth believes institutions have no preference. Only three minor line wholesalers venture an opinion concerning retailers' and wholesalers' preferences. All three agree that other wholesalers prefer selling frozen fish; two of the three think retailers, too, want frozen rather than fresh fish.

C. Summary

It is evident from the above discussion and the data in Table 8 that major line distributors are nearly equally divided as to their personal preference for handling fresh versus frozen fish. Minor line wholesalers, however, agree unanimously in their preference for frozen fish. Wholesalers who prefer frozen fish also tend to agree almost unanimously that other members of the distribution channel (restaurants, institutions, retailers, and other wholesalers) want frozen instead of fresh fish. Among the major line wholesalers who prefer fresh fish, two-thirds believe restaurants and retailers would rather handle fresh fish, while one-half think institutions and other wholesalers want fresh fish. These data support the conclusion that the market is segmented according to form of fish offered, a view held by a preponderant majority of the wholesalers handling frozen fish. As a consequence, wholesalers tend to view their customers' preferences in terms of the form of fish they (the wholesalers) prefer handling.

TABLE 8

WHOLESALERS' VIEWS ON PREFERENCES FOR FRESH OR FROZEN

	Establishment Handling Fish														
	Respondent			Restaurants			Institutions			Retailers			Other Wholesalers		
MAJOR LINE	Fresh	Frozen	Both	Fresh	Frozen	Both	Fresh	Frozen	Both	Fresh	Frozen	Both	Fresh	Frozen	Both
A-1		X			X			X		X				X	
A-2		X			X			X							
A-3	X					X			X		X		X		
A-4	X				X		X			X			X		
C-1		X									X		X		
C-2			X	X				X		X				X	
C-3		X			X			X			X			X	
C-4	X					X									
C-5	X				X					X					
C-6		X			X			X			X			X	
C-7	X			X			X							X	
C-8	X			X			X								X
C-9		X			X			X			X			X	
Subtotal	6	6	1	4	6	2	3	6	1	4	5	0	3	6	1

TABLE 8

WHOLESALERS' VIEWS ON PREFERENCES FOR FRESH OR FROZEN

	Establishment Handling Fish														
	Respondent			Restaurants			Institutions			Retailers			Other Wholesalers		
	Fresh	Frozen	Both	Fresh	Frozen	Both	Fresh	Frozen	Both	Fresh	Frozen	Both	Fresh	Frozen	Both
MINOR LINE															
A-5		X			X										
A-6		X			X			X			X				
A-7		X			X										
A-8		X			X										
A-9 No response															
A-10		X			X			X		X				X	
C-10		X			X			X							
C-11 No response															
C-12		X			X			X							
C-13		X			X				X						
C-14		X			X									X	
C-15		X			X			X			X			X	
Subtotal	0	10	0	0	10	0	0	5	1	1	2	0	0	3	0
Subtotal, Major Line	6	6	1	4	6	2	3	6	1	4	5	0	3	6	1
GRAND TOTAL	6	16	1	4	16	2	3	11	2	5	7	0	3	9	1

Source: Survey Data.

XI. RESPONDENTS' OPINIONS WHY FRESH OR FROZEN IS PREFERRED

A. Reasons for Preference for Fresh Fish

When asked why they and their customers prefer fresh fish, the wholesalers say it sells better than frozen fish. They also report that they and other wholesalers obtain higher profits on fresh fish than frozen fish. Similarly, it is their opinion that restaurants and institutions prefer fresh fish because it tastes better than frozen fish. Lastly, they feel retailers want fresh fish because household consumers prefer fresh fish, and it looks better than frozen fish.

B. Reasons for Preference for Frozen Fish

Wholesalers with a preference for frozen fish base their preference on such characteristics as ease of handling, avoidance of expensive direct labor processing cost, less waste or spoilage, and a consistent supply of frozen fish. They agree unanimously that restaurants and institutions prefer frozen fish primarily because of portion control and secondarily because of less spoilage and ease of handling. There is less unanimity as to why retailers prefer frozen fish. Less waste, ease of handling, and cheaper price are each mentioned three or four times. No direct labor costs, less spoilage, and consistent supply are mentioned less frequently.

C. Reasons for No Preference

The wholesaler who says he has no preference indicates he is willing to handle any form of fish that makes money. In cases where wholesalers report that restaurants and institutions prefer either frozen or fresh fish, they explain that the higher class restaurants sell fresh fish and the lower class sell frozen fish. In addition, some restaurants and institutions want fresh fin along with frozen shell.

D. Summary

Wholesalers who identify frozen fish as the product they personally prefer do so primarily on the basis it is easier to handle; there is no direct labor processing cost; and there is less waste or spoilage involved. They are unanimous in their opinion that restaurants prefer frozen fish because of portion control, less spoilage, and ease of handling. Similarly, less waste or spoilage, ease of handling, and no direct labor processing cost are the key reasons why these wholesalers think retailers, as well as other wholesalers, prefer frozen fish. The emphasis is clearly on the convenience of and presumably the lower direct cost to the supplier in handling this product. In contrast, wholesalers preferring fresh fish mention such demand or consumer oriented characteristics as fresh fish tastes better, looks better, and discriminating customers prefer fresh fish, as well as the fact that there is a higher profit with fresh than frozen fish. The reader may recall, of course, that few major line wholesalers handling both fresh and frozen fish reported they actually marked up fresh fish more than frozen fish. Markups differed by type of customer (restaurants, retail food stores, etc.) but, within a given customer category (retail food store, for example), a particular distributor's markups on fresh and frozen fish is more likely to be the same than different (see Section VI, Table 3).

TABLE 9

RESPONDENTS' OPINIONS WHY FRESH OR FROZEN IS PREFERRED

Reasons for Preference	NUMBER OF TIMES MENTIONED FOR TYPE OF ESTABLISHMENT				
	You	Restaurants	Institutions	Retailers	Other Wholesalers
A. Fresh Fish					
Customer preference				4	
Tastes Better	2	3	2		
Sells better	3	1	1	2	2
Looks better				1	
Higher profit	3				1
B. Frozen Fish					
Less waste	4			4	4
No direct labor cost	7			2	4
Ease of handling	9	2	2	3	4
Less spoilage	3	4	3	2	3
Consistent supply	3			1	1
Portion control cuts		10	8		
Cheaper price				3	1
C. Both					
Higher class sell fresh		2			
Lower class sell frozen		2			
Want fresh fin, frozen shell		2	2		
Whatever makes money	1				

Source: Survey Data.

XII. BRANDING

In the eyes of the consumer, a product such as fish represents not only a physical entity, but it also encompasses such elements as the package, label, and brand name associated with the product. Types of brands, wholesalers' opinions of customers' brand preferences, and the possible impact of additional branding on sales are discussed in this section. Tabulations of the survey results are contained in Table 10.

A. Types of Brands

Processors' brands are the brand names given to the product by the manufacturer or the basic processors and used to promote it. Frozen and canned fish, for instance, carry such processors' labels as Gortons, Mrs. Paul's, or Bumble Bee. When a reseller such as a wholesaler or retailer attaches his brand name to the product, private brands, house brands, or reseller brands emerge.

B. Branding of Fresh Fish

Perishable fresh wet fish, of course, is unlike other perishables when it comes to branding and establishing recognized brand names. Many consumers are familiar with such brand names as Sunkist or Blue Goose on fruits; Land-O-Lakes on dairy products; and the Armour, Swift, or Morrell Labels on meat. Perishable wet fish, however, is generally purchased by species rather than by brand name. The data in Table 10 shows that five wholesalers sell fresh fish unbranded; one wholesaler asserts he brands his fresh fish; and the remaining five wholesalers report they handle processors' brands. In reality, this latter group also sells unbranded fresh fish. They purchase fresh fish from processors who may mark their containers with their respective company names, but these names are neither associated with the fish when it is resold nor used by other resellers to promote the fish down the line in the channel of distribution. Some of the confusion in response to this question may be attributed to the lack of familiarity with the nomenclature used, the tendency to equate species identification with brand name, and the way this particular question was worded.

C. Branding of Frozen Fish

All of the major and minor line wholesalers of frozen fish sell a branded product. Their branding policies, however, are substantially different. Twelve of the 13 major line wholesalers handle frozen products branded by the processors. One firm sells both processors' brands and brands carrying his own firm's brand name. Five minor line wholesalers handle processors' brands, while six feature their own brands along with those of processors'. Minor line wholesalers, consequently, are more likely to offer their own brand of frozen fish than major line distributors.

D. Branding of Canned Fish

The brand pattern of canned fish is similar to that of frozen fish products. That is to say, like frozen fish, none of the canned fish is sold unbranded. In addition, all major line wholesalers with canned fish sell processors' brands. Although a majority of the minor line wholesalers also sell only processors' brands, two minor line distributors offer both their own brands plus those of processors, while one firm concentrates solely on its own brand name of canned fish.

E. Wholesalers' Opinions of Customers' Brand Preferences

Seven wholesalers think customers prefer processors' brands of fresh fish even though fresh fish is typically sold in unbranded form by wholesalers. The remaining four wholesalers handling fresh fish have no opinion about customers' brand preferences.

Every one of the major line wholesalers indicates their customers prefer processors' brands to wholesalers' brands on frozen fish. Nine of the 11 minor line wholesalers also support this contention, while two distributors say customers prefer their own wholesalers' sponsored brands over processors' brands.

Among wholesalers offering canned fish, all major line wholesalers venture the opinion that customers prefer processors' brands to wholesalers' brands. Four of the eight minor line wholesalers with canned fish agree, two disagree and two have no opinion.

F. Affect of Additional Branding on Sales

Not one major or minor line wholesaler thinks additional branding would increase sales. Three wholesalers may be hedging, however, since they say they have no opinion.

G. Summary

Frozen and canned fish are usually sold under a processor's brand name, or a wholesaler's sponsored brand may be sold in conjunction with a processor's brand of frozen or canned fish. There appears to be some confusion about the branding of fresh fish. Fresh fish is seldom sold by brand name to ultimate users, despite the fact that half of the major line wholesalers with fresh fish report that processors' brand names appear on their products. There is no doubt among a substantial majority of wholesalers, however, that customers prefer processors' brands to wholesalers' brands on fish. Similarly, no wholesaler thinks additional branding will increase sales. This latter opinion is an especially interesting conjecture, because it refutes the suggestion that fresh fish ought to be branded and promoted more aggressively by brand name.

TABLE 10

BRANDING

Form of Fish and Type of Brand	Wholesale Line Major Line	Wholesale Line Minor Line	Total
A. Types of Brand Names Appearing on Wholesaler's Product			
Fresh Fish			
Processor's Brands	5	-	5
Wholesaler's Brands	1	-	1
Unbranded	4	1	5
Frozen Fish			
Processor's Brands	12	5	17
Wholesaler's Brands	-	-	-
Both	1	6	7
Unbranded	-	-	-
Canned Fish			
Processor's Brands	9	5	14
Wholesaler's Brands	-	2	2
Both	-	2	2
Unbranded	-	-	-
B. Wholesaler's Opinions of Customers' Brand Preference			
Fresh Fish			
Processor's Brands	7	-	7
Wholesaler's Brands	-	-	-
No Opinion	3	1	4
Frozen Fish			
Processor's Brands	13	9	22
Wholesaler's Brands	-	2	2
No Opinion	-	-	-
Canned Fish			
Processor's Brands	9	4	13
Wholesaler's Brands	-	2	2
No Opinion	-	2	2
C. Would Additional Branding Increase Sales?			
Yes	-	-	-
No	12	10	22
No Opinion	1	2	3

Source: Survey Data.

XIII. PROMOTIONAL METHODS UTILIZED BY WHOLESALERS

The promotional methods utilized by wholesalers are categorized into four basic groups in Table 11. Because some wholesalers employ several promotional techniques, total responses exceed the number of wholesalers surveyed.

A. No Promotions

One-third of the wholesalers either take a dim view of promotion, or do not recognize that some of their sales activity is promotional in nature, since they report they do not promote their products. "No promotion" responses were elicited from three of the 13 major line wholesalers and five of the 12 minor line businesses.

B. Inducements to Resellers

Promotional inducements to resellers cover such practices as (1) featuring a weekly special; (2) offering special discounts in price; (3) providing displays, advertisements, or advertising allowances; and (4) introductory offers and/or dinners. The major line wholesalers favor the provision of displays, advertisements, and advertising allowances over weekly specials, or price discounts. Minor line wholesalers mention price discounts more often than promotional displays or weekly specials. Minor line wholesalers (two firms) also utilize introductory offers and/or dinners, whereas major line wholesalers ignore this type o inducement.

C. Sales Pressure on Salesmen and Resellers

Besides price and promotional inducements to resellers, several wholesalers say they stimulate sales either by running sales contests among their salesmen or by compensating them on a commission basis. A major and a minor line wholesaler identify sales contests as a promotional tool, while one major line and two minor line distributors acknowledge using sales commissions to motivate their salesmen. Similarly, five major and one minor line wholesalers report using telephone solicitation of resellers to push sales.

D. Other Forms

In a more positive vein, advertising bulletins and flyers to retailers are mentioned by two major line distributors and one minor line wholesaler. One major line outfit points to advertisements in the yellow pages as his form of advertising to promote sales. Needless to say, nearly all of the other wholesalers are listed in the yellow pages; but they do not mention this as a method of stimulating sales to their customers.

E. Summary

Although sales promotional tools are readily accessible to all businesses, 23 per cent of the major line wholesalers and 42 per cent of the minor line distributors report they engage in "No promotion." A tally of the responses from the 77 per cent of the major line wholesalers who engage in promotion shows 53 per cent of the responses are in the nature of positive inducements to resellers, 33 per cent are essentially sales push techniques, while 14 per cent are advertisements to retailers or utilization of the yellow pages. For the 58 per cent of the minor line wholesalers engaged in promotion, 74 per cent of the responses are classified as positive inducements to resellers, 21 per cent as sales push methods, and 5 per cent as advertisements to retailers. Clearly, among the firms who report utilizing promotional techniques, the minor line wholesalers mention positive inducements to resellers more often than major line firms (74 per cent vs. 53 per cent), and sales push techniques less often (21 per cent vs. 33 per cent).

TABLE 11

MEANS REPORTED BY WHOLESALERS TO PROMOTE SALES

Promotional Means	Wholesale Line and Number of Times Mentioned: Major Line	Minor Line	Total
I. Inducements to resellers			
a. Offer a weekly special	3	2	5
b. Special price discount	3	6	9
c. Displays, ads, & allowances	5	4	9
d. Introductory offers, dinners	-	2	2
II. Pressure on Salesmen & Resellers			
e. Sales contests	1	1	2
f. Sales commissions	1	2	3
g. Telephone sales	5	1	6
III. Other Forms of Advertising			
h. Bulletins/flyers to Retailers	2	1	5
i. Yellow Pages	1	-	1
IV. No Ptomotions			
j. None	3	5	8

Source: Survey Data.

XIV. WHOLESALERS' AVERAGE ORDER SIZE AND SALES TERMS BY CUSTOMER CLASS

Beginning with this section and continuing through Sections XV, XVI, and XVII, the sales activities of wholesalers concerning typical size orders, sales terms, territory covered, delivery time, method of transportation, amount of fabricating, and spoilage problems, are discussed. Section XIV deals with average order size and sales terms by customer class. These data are contained in Table 12 at the end of this section.

A. Explanation of Median Order and Modal Credit Terms

The average size order data in Table 12 are compared in terms of median size orders. The median value is the midpoint of an array of figures arranged in ascending order with an equal number of observations below and above the midpoint. For example, if 7 wholesalers report average sales per order to restaurants of 20 lbs., 35 lbs., 40 lbs., 50 lbs., 100 lbs., 200 lbs., and 1,000 lbs., respectively, the median value or midpoint is a 50 lb. typical order. In the event only six wholesalers report their average size orders, such as sales by major line wholesalers to institutions in Table 12, the midpoint lies between the third and fourth figures arrayed in ascending order. That is to say, when the median falls between 50 and 75 lbs., the midpoint value between these two figures is approximately 12.5 lbs. above 50 lbs., and may be rounded to a median value of 63 lbs.

Unlike median size orders which represent midpoints in an ascending sequence, the credit term modal value is the credit term that appears most frequently in a series. For example, if two of ten wholesalers report credit terms of seven days, and three have 14 day credit terms, while the remaining five wholesalers operate on a 30 day credit basis, the modal (most frequent) credit term is 30 days.

B. Major Line Wholesalers' Median Order and Modal Credit Terms by Customer Class

The largest median size order of major line wholesalers is sales to other wholesalers. The median value is 850 lbs. This is followed by sales to retailers whose median size order is 175 lbs., or five times less than the median order of other wholesalers. The median order of institutions runs 63 lbs., and that of restaurants 50 lbs. If each customer were to purchase once a week, the typical major line wholesaler would need 17 restaurants to generate the same total median order as one wholesale account. A major line wholesaler's cost of doing business with 17 retailers would obviously be higher than the cost of the sale to one wholesaler. The modal credit terms to other wholesalers, retailers, and institutions, none the less, are typically 30 day terms. Retailers, on the other hand, purchase either on a cash or seven day credit basis.

C. Minor Line Wholesalers' Median Order and Modal Credit Terms by Customer Class

Unlike some of the major line wholesalers, the minor line wholesalers report no sales to other wholesalers. Their largest median order customer class is retailers, whose median size order is 250 lbs. The median size order of institutions is 63 lbs., and restaurants 48 lbs. Retailers purchase primarily on a cash basis, while the modal credit term for institutions and restaurants is 30 days.

D. Summary

The largest size median order by customer class is that of other wholesalers. None of the minor line wholesalers sells to other wholesalers, and not all major line wholesalers sell to other wholesalers. For major line wholesalers who do so, however, the median order is 850 lbs. Both the major and minor line wholesalers sell to retailers. Interestingly, the 250 lbs. median retail store order of the minor line wholesalers exceeds the 175 lb. median retail store order of the major line wholesalers. The median size institutional order of 63 lbs. is identical for major and minor line wholesalers. Similarly, the median size restaurant orders are nearly identical, with 50 lbs. for major line wholesalers, and 48 lbs. for minor line distributors. The modal 30 day credit terms for restaurants and institutions are also identical for both groups of wholesalers. The modal credit term of major line wholesalers to other wholesalers is 30 days. Retailers, on the other hand purchase on a cash basis from minor line wholesalers, while major line wholesalers operate on a cash or seven day credit term basis with retail food stores. Because credit terms are purportedly established in keeping with the time it takes to sell a product and thereby generate income to pay the supplier, the retailers are either being discriminated against in length of credit terms, or are viewed as a hazardous credit risk, since so many wholesalers sell to them on a cash basis only.

TABLE 12

WHOLESALERS' AVERAGE ORDER AND SALES TERMS BY CUSTOMER CLASS

Wholesaler	Customer Class							
	Restaurants		Institutions		Retailers		Other Whlslrs.	
	Average Order Lbs.	Sales Terms	Average Order Lbs.	Sales Terms	Average Order Lbs.	Sales Terms	Average Order Lbs.	Sales Terms
Major Line								
A-1	20 lbs.	30 days	30 lbs.	30 days	30 lbs.	7 days	40 lbs.	30 days
A-2	600	NA	1,000	NA				
A-3	NA	Cash	NA	30 days	NA	Cash	NA	30 days
A-4	NA	Cash	NA	Cash	NA	Cash	NA	Cash
C-1					500	7 days	1,200	30 days
C-2	35	14 days	75	30 days	200	Cash	500	7 days
C-3			50	30 days	500	30 days		
C-4	50	30 days	100	30 days				
C-5	200	30 days			150	7 days		
C-6							10,000	30 days
C-7	NA	30 days	NA	30 days				
C-8	NA	Cash	NA	Cash			NA	30 days
C-9	50	30 days	45	30 days	25	30 days		
Median Order	50 lbs.	-------	63 lbs.	-------	175lbs.	-------	850lbs.	-------
Modal Terms	-------	30 days	-------	30 days	-------	Cash or 7 days	-------	30 days

NA = No Answer
Cash = Cash with order or Cash on Delivery

Source: Survey Data.

TABLE 12

WHOLESALERS' AVERAGE ORDER AND SALES TERMS BY CUSTOMER CLASS

	Customer Class							
	Restaurants		Institutions		Retailers		Other Whlslrs.	
Wholesaler	Average Order Lbs.	Sales Terms	Average Order Lbs.	Sales Terms	Average Order Lbs.	Sales Terms	Average Order Lbs.	Sales Terms
Minor Line								
A-5	23 lbs.	Cash						
A-6	20	Cash	50 lbs.	Cash	250 lbs.	Cash		
A-7					250	Cash		
A-8					500	Cash		
A-9	10	Cash			25	Cash		
A-10			NA	30 days	NA	Cash		
C-10	50	30 days	50	30 days				
C-11	125	14 days	1,500	45 days				
C-12	150	30 days	50	30 days				
C-13	75	30 days	75	30 days				
C-14	NA	7 days	NA	30 days	NA	14 days		
C-15	45	30 days	45	30 days	150	7 days		
Median Order	48 lbs.	-------	63 lbs.	-------	250 lbs.	-------		
Modal Terms	-------	30 days	------	30 days	-------	Cash		

NA = No Answer
Cash = Cash with order or Cash on Delivery

Source: Survey Data.

XV. MARKET AREA SERVED, DELIVERY TIME, AND METHOD OF TRANSPORTING CUSTOMER ORDERS

A. Market Area Served

1. Major Line Wholesalers

The data in Table 13 indicate major line wholesalers market their merchandise in four distinct size territories. Six of the 13 firms concentrate on selling to local resellers within the Greater Cleveland or Akron Metropolitan area. A second group, consisting of four major line wholesalers, covers a sales territory whose boundaries reach 60 to 100 miles from home base. The third group is composed of two wholesalers who market their fish throughout Ohio. The fourth category is a one company representation whose sales territory is national.

2. Minor Line Wholesalers

The minor line wholesalers may be categorized by size of sales territory into one of three groups. Four of the 12 wholesalers focus on local market customers primarily within a 20-mile radius of their establishment. A second group of four wholesalers operates within a radius of 60 to 70 miles, while the remaining four firms serve customers 90 to 120 miles away.

B. Delivery Time by Customer Class

1. Major Line Wholesalers

The delivery time to restaurants and institutions ranges from four to 48 hours among major line wholesalers. The modal (most frequent) figure is 24 hours. The range in delivery time to retailers and other wholesalers extends from one-half day (four hours) to seven days. The modal time for retail deliveries is four hours, whereas the modal time for delivery to other wholesalers is 24 hours.

2. Minor Line Wholesalers

Delivery time for minor line wholesalers ranges from two to 48 hours to restaurants and institutions, and one to three days for delivery time to retailers. Their modal delivery time to all three groups of customers is 24 hours. As indicated previously in Section XIV, minor line wholesalers report no sales to other wholesalers.

C. Method of Transporting Customers' Orders

1. Major Line Wholesalers

Nearly all major line wholesalers deliver customer orders in their own refrigerator trucks. One wholesaler, however, relies on other wholesalers to pick up and transport their orders in their own equipment when they purchase from him. The wholesaler who sells nationally uses common carriers to transport his merchandise.

2. Minor Line Wholesalers

The minor line wholesalers operate similar to major line wholesalers in delivering orders. Only one firm functions on a customer pickup basis. The others provided delivery service by truck.

D. Summary

Approximately one-half of the major line and one-third of the minor line wholesalers are local market distributors. That is to say, they ordinarily sell to customers within the Greater Cleveland or Akron Metropolitan area. Another one-third of the minor line wholesalers operate within a radius of 60 to 70 miles from their establishment, whereas the second group of major line wholesalers (30 per cent) cover an area 60 to 100 miles away. The last one-third of the minor line wholesalers serve customers 90 to 120 miles distant. Their group three counterparts among the major line wholesalers, represented by 15 per cent of the firms, market fish throughout Ohio. One major line distributor sells to customers nationally. These data show that a higher proportion of major line wholesalers than minor line wholesalers are local market distributors. The data further indicate, however, that the remaining major line wholesalers have larger market areas than the minor line wholesalers.

The time required to deliver orders to restaurants and institutions ranges from four to 48 hours for major line wholesalers compared to two to 48 hours for minor line establishments. For orders delivered by major line wholesalers to retailers and other wholesalers, the time required ranges from one-half day (four hours) to seven days. Minor line wholesalers' delivery time to retailers ranges from one to three days. Obviously, the range of delivery time to restaurants and institutions is nearly identical for both classes of wholesalers. The range of delivery time to retailers suggests that major line wholesalers deliver more rapidly to retailers than minor line firms, with the exception of the major line establishment with customers located throughout the country. Although some major line wholesalers cover larger sales territories than minor line distributors, they frequently report their average delivery time is four hours on orders they receive in the morning. This is possible, of course, because most of their business is derived from customers located in close proximity to their place of business rather than on the periphery of their sale's territory.

The modal delivery time is 24 hours to nearly all classes of customers by both groups of wholesalers. Proposals to provide 24 hour order/delivery service, consequently, have little relevancy since most resellers in the area surveyed already have such service.

With the exception of two wholesalers who operate on a customer pick-up basis, local and regional wholesalers offer truck delivery service.

TABLE 13

WHOLESALERS' DELIVERY TIME, METHOD OF TRANSPORTATION IN DELIVERY OF CUSTOMER'S ORDERS, AND AREA SERVED

		Customer Class							
		Restaurants		Institutions		Retailers		Other Whlslr	
Wholesaler	Area Served	Del'y Time	Transp	Del'y Time	Transp	Del'y Time	Transp	Del'y Time	Transp
Major Line A-1	60 mi	4 hr	ref. truck	4 hr	ref. truck	4 hr	ref. truck	4 hr	ref. truck
A-2	Ohio	24 hr	ref. truck	24 hr	ref. truck				
A-3	20 mi	24 hr	ref. truck	24 hr	ref. truck	24 hr	ref. truck	24 hr	ref. truck
A-4	20 mi	24 hr	ref. truck	24 hr	ref. truck	24 hr	ref. truck	24 hr	ref. truck
C-1	90 mi					4 hr	ref. truck	pick up	custo.
C-2	Ohio	24 hr	ref. truck	24 hr	ref. truck	24 hr	ref. truck	24 hr	ref. truck
C-3	90 mi			24 hr	ref. truck	7 day	ref. truck		
C-4	20 mi	4 hr	ref. truck	4 hr	ref. truck				
C-5	20 mi	4 hr	ref. truck			4 hr	ref. truck		
C-6	U.S.							7 day	common carrier
C-7	20 mi	24 hr	ref. truck	24 hr	ref. truck				
C-8	20 mi	48 hr	ref. truck	48 hr	ref. truck			48 hr	ref. truck
C-9	100 mi	4 hr	ref. truck	4 hr	ref. truck	4 hr	ref. truck		
Modal Figure		24 hr	-----	24 hr	-----	4 hr	-----	24 hr	------
Range		4/48 hr	----	4/48 hr	----	1/2-7 days--		1/2-7 days--	

Source: Survey Data.

TABLE 13

WHOLESALERS' DELIVERY TIME, METHOD OF TRANSPORTATION IN DELIVERY OF CUSTOMER'S ORDERS, AND AREA SERVED

		Customer Class							
		Restaurants		Institutions		Retailers		Other Whlslrs	
Wholesaler	Area Served	Del'y Time	Transp	Del'y Time	Transp	Del'y Time	Transp	Del'y Time	Transp
Minor Line									
A-5	60 mi	4 hr	ref. truck						
A-6	100 mi	48 hr	ref. truck	48 hr	ref. truck	24 hr	ref. truck		
A-7	100 mi					24 hr	ref. truck		
A-8	70 mi					60 hr	truck		
A-9	20 mi	pick up	custo			pick up	custo		
A-10	20 mi			24 hr	truck	60 hr	truck		
C-10	120 mi	24 hr	ref. truck	24 hr	ref. truck				
C-11	90 mi	24 hr	ref. truck	24 hr	ref. truck				
C-12	60 mi	2 hr	ref. truck	2 hr	ref. truck				
C-13	20 mi	24 hr	truck	24 hr	truck				
C-14	20 mi	NA	NA	NA	NA	NA	NA		
C-15	60 mi	24 hr	ref. truck	24 hr	ref. truck	24 hr			
Modal Figure		24 hr	-----	24 hr	-----	24 hr	------		
Range		2/48 hr	-----	2/48 hr	-----	1/3 days	-----		

NA = No Answer

Source: Survey Data.

XVI. WHOLESALERS' FISH FABRICATING ACTIVITY

Does the seafood wholesaler add value to his product by modifying it physically, or does he resell his fish in the same form it is received? The data dealing with this question are arranged according to form of fish received (inputs) and proportion of fabrication (product modification) in Table 14.

A. Explanation of Terms

The respective columnar headings in Table 14 are identified by letters (a) to (f) from left to right. "Whole" fish in column (a) under Inputs are unprocessed shell and fin fish. For example, the fin fish are not headed, and they may or may not be gutted. "Processed" fish in column (b) are headed, cleaned, and filleted, if fin fish. "Prepared" fish in column (c) represent processed fish that are cured, cooked, and/or battered, pickled, or canned.

Product modification (manufacturing) activities are shown in columns (d) to (f). In column (d), "Processing Only," the wholesalers clean and fillet either whole fin fish or they process shell fish before reselling them. Column (d), "Process and Prepare," represents not only processing the fish but also cooking and/or breading, curing, or pickling the processed fish. Lastly, the proportion of fish purchased in process form and then prepared (cooked, breaded, etc.) by wholesalers is given in column (f) as "Prepare Only."

B. Major Line Wholesalers

Analysis of the input data discloses that eight of the 13 major line wholesalers receive all forms of fish, i.e., whole, processed, and prepared. Seven of these eight engage in product modification before reselling their fish. Three of the seven firms process fish only. Two others prepare fish already processed. One of the two remaining wholesalers processes some fish in addition to also processing and preparing other fish. The second wholesaler both processes fish and prepares fish already processed.

Two major line wholesalers purchase whole and processed fish, but no prepared fish. Both firms, however, prepare processed fish that they have purchased. One of these establishments also prepares all whole fish that he processes.

Turning to the three major line wholesalers who do not handle whole fish, the data indicate they purchase 95 and 97 per cent of their fish in processed form, with another five and three per cent, respectively, in prepared form. One of these firms prepares 85 per cent of the processed fish it purchases, while the second organization resells its fish without further fabrication. The third major wholesaler concentrates solely on procuring and distributing prepared fish.

C. Minor Line Wholesalers

Among the minor line wholesalers, only one organization purchases all forms of fish. This company is also the only establishment to fabricate fish.

Nine others of the 12 minor line wholesalers handle both processed and prepared fish. Six of the nine firms emphasize prepared fish rather than processed fish. Prepared fish represents 75 to 95 per cent of their total purchases. The purchase of processed fish by the other three firms in this group ranges from 50 to 75 per cent of total inputs.

The remaining two minor line wholesalers still unaccounted for in this discussion handle only prepared fish. Like their cohorts who purchase both processed and prepared fish, none of these establishments add value to their product by altering its form.

D. Summary

Nearly 80 per cent of the major line wholesalers add value to their products by changing their form in one manner or another. With the exception of one firm, minor line wholesalers, on the other hand, resell their products without further fabrication or manufacturing.

The shortage and cost of qualified labor, alluded to especially by major line wholesalers earlier in this monograph, is clearly related to their processing and/or preparation of fish. As a matter of fact, several indicate this is why they stopped handling fish that required processing.

If this trend continues, primary sea coast wholesalers and manufacturers will obviously find themselves doing more processing.

The difference in product mix between minor line and major line wholesalers is also clearly evident. According to the form of fish purchased, two-thirds of the minor line wholesalers emphasize prepared fish in their product mix, whereas only one-seventh of the major line wholesalers do so. Among the major line wholesalers, on the other hand, nearly two-thirds purchase predominantly processed fish, and only two firms in this group put most of it in prepared form for resale. Whole fish is the major form of fish procured by three firms. All three firms, moreover, primarily process their whole fish rather than process and prepare it.

TABLE 14

DEGREE OF FABRICATING PERFORMED BY WHOLESALERS

	INPUTS			PRODUCT MODIFICATION		
	PERCENTAGE OF FISH RECEIVED			FABRICATING DONE BY WHOLESALERS		
	(a)	(b)	(c)	(d)	(e)	(f)
Major Line	Whole	Processed	Prepared	Processing Only	Process & Prepare	Prepare Only
A-1	30%	50%	20%	30%	-	-
A-2	10	65	25	-	-	15%
A-3	70	20	10	70	-	-
A-4	75	13	12	75	-	-
C-1	20	40	40	-	-	-
C-2	20	80	-	-	-	10
C-3	-	-	100	-	-	-
C-4	75	23	2	70	5	-
C-5	2	80	18	-	-	15
C-6	-	97	3	-	-	82
C-7	-	95	5	-	-	-
C-8	45	55	-	-	45	15
C-9	30	45	25	30	-	20

Source: Survey Data.

TABLE 15

DEGREE OF FABRICATING PERFORMED BY WHOLESALERS

	INPUTS			PRODUCT MODIFICATION		
	PERCENTAGE OF FISH RECEIVED			FABRICATING DONE BY WHOLESALERS		
	(a)	(b)	(c)	(d)	(e)	(f)
	Whole	Processed	Prepared	Processing Only	Process & Prepare	Prepare Only
Minor Line						
A-5		25%	75%	-	-	-
A-6	-	15	85	-	-	-
A-7	-	60	40	-	-	-
A-8	-	5	95	-	-	-
A-9	-	-	100	-	-	-
A-10	-	16	84	-	-	-
C-10	5%	86	9	5%	-	-
C-11	-	50	50	-	-	-
C-12	-	20	80	-	-	-
C-13	-	10	90	-	-	-
C-14	-	-	100	-	-	-
C-15	-	75	25	-	-	-

Source: Survey Data.

XVII. WHOLESALERS' SPOILAGE PROBLEMS, AFFECT ON HANDLING, AND SUGGESTIONS TO REDUCE SPOILAGE

A. Major Line Wholesalers

1. Fresh Fish

Ten of the 13 major line wholesalers in this survey handle fresh as well as frozen fish. Nine of the ten acknowledge spoilage problems with fresh fish. As a consequence, two establishments now carry more frozen and less fresh fish in their product mix. Four managers indicate they combat the fresh fish spoilage problem by stressing faster turnover. They either cut their fresh fish inventory or stock only fast selling species. Two other managers emphasize that fresh fish must be kept fully iced at all times, as well as delivered frequently. One firm says the sole effect spoilage had on them was the necessity to freeze unsold fresh fish before it spoiled. Five of the nine managers feel nothing can be done by their suppliers to prevent spoilage. Four, however, think the spoilage problem could be alleviated by their suppliers if they would fully ice fresh fish, utilize better containers and packaging material, and ship more often on a regularly scheduled basis with more convenient arrival times at destinations.

2. Frozen Fish

Although all 13 major line wholesalers distribute frozen fish, only five report having spoilage problems with frozen fish. Several effects on handling frozen fish are described by the latter group. First, good refrigeration equipment is indispensable. Second, inventory must be carefully rotated. Third, precautions must be taken to prevent defrosting and dehydration. When asked how their suppliers could assist in reducing spoilage, two managers indicate there is nothing suppliers can do that they are not doing already. Two of the other three, however, point to proper shipping by suppliers, while the third wholesaler thinks better code dating and more effective control of the quality of imported frozen fish are essential if suppliers are to mitigate the spoilage problem.

B. Minor Line Wholesalers

1. Fresh Fish

Like the major line wholesalers, the only minor line wholesaler who sells fresh fish says he, too, has spoilage problems. The major effect on his operations is the fact he has to freeze the excess fresh fish and subsequently sell them as frozen fish. He has no suggestions regarding how suppliers can reduce spoilage of fresh fish.

2. Frozen Fish

Although 11 of the 12 minor line wholesalers distribute frozen fish, few have any spoilage problems. Of the three firms acknowledging such difficulty, one firm returns the spoiled product to the supplier, while another emphasizes the need for special freezers and refrigerator trucks in handling frozen fish. Two of the three distributors say suppliers can eliminate the problem by adopting better control procedures to prevent thawing in transit. The third respondent thinks better inventory control by suppliers can also reduce deterioration in quality from dehydration.

C. Summary

Overall, ten of the 11 wholesalers handling fresh fish indicate they have spoilage problems with the product. To overcome the problem, they handle fresh fish on a rapid turnover basis, frequently iced and deliver it, freeze any surplus in danger of spoiling, or de-emphasize fresh fish by offering more frozen fish to their customers. When asked how suppliers could aid in preventing spoilage, six of the ten respondents say suppliers are already doing all they can. The other four, however, think suppliers ought to ice the fish fully, utilize better packaging, and ship more frequently.

Despite the fact wholesalers earlier asserted there were no problems in handling frozen fish, eight of the 24 with frozen fish report there are spoilage problems. To handle frozen fish effectively, they not only have to install special freezers in their plants and trucks to eliminate thawing, but they also have to rotate inventory carefully to control dehydration. Turning to the question of what suppliers can do to prevent spoilage, four firms suggest that suppliers control their goods in transit more carefully to eliminate thawing. Two others think code dating would help in rotating their inventory. The remaining two respondents have no suggestions.

TABLE 15

SPOILAGE PROBLEMS, AFFECT ON HANDLING, AND METHODS OF PREVENTION REPORTED BY WHOLESALERS

Wholesalers	Spoilage Problems? Fresh	Frozen	Affect on Handling by Wholesalers	How Suppliers Could Prevent Spoilage
Major Line				
A-1	Yes	Yes	Carry more frozen	ship fresh & frozen properly
A-2	Yes	No	Carry more frozen	nothing
A-3	Yes	Yes	Ice carefully; cut inventory	nothing
A-4	Yes	No	Handle fast-moving fish	nothing
C-1	-	Yes	Stop defrosting; dehydration of old fish	better code dating; control imported fish quality
C-2	Yes	No	Deliver more often; better equipment	better containers, packing, shipping schedules
C-3	-	No		
C-4	-	No		
C-5	Yes	Yes	Ice, refrigerate	better icing, packing shipping schedule
C-6	-	Yes	Rotate inventory	nothing
C-7	Yes	No	Freeze unsold fish	nothing
C-8	Yes	No	None	nothing
C-9	Yes	No	Lower inventory, sell fast	better icing, shipping

TABLE 15

SPOILAGE PROBLEMS, AFFECT ON HANDLING, AND METHODS OF PREVENTION REPORTED BY WHOLESALERS

Wholesalers	Spoilage Problems? Fresh	Frozen	Affect on Handling by Wholesalers	How Suppliers Could Prevent Spoilage
Minor Line				
A-5	-	No		
A-6	-	No		
A-7	-	No		
A-8	-	Yes	Special freezers, trucks needed	better inventory control
A-9	-	-		
A-10	-	None		
C-10	Yes	Yes	Freeze unsold fresh	control thawing in transit
C-11	-	Yes	Return to supplier	control thawing in transit
C-12	-	None		
C-13	-	None		
C-14	-	None		
C-15	-	None		

Source: Survey Data.

XVIII. OTHER PROBLEMS (NONSPOILAGE) IN HANDLING FISH AND POSSIBLE SOLUTIONS

Spoilage problems and ways to combat them have already been discussed. In this section, attention is focused on nonspoilage problems in handling fish. Respondents' replies are summarized in Table 16 at the end of this section.

A. Major Line Wholesalers

1. Fresh Fish

Curiously, although nine of the ten major line wholesalers handling fresh fish acknowledge having spoilage problems, only four of these firms note other problems. Two establishments are concerned with the high cost of direct labor in preparing whole fresh fish. Neither firm has any suggestions about how to resolve the dilemma. The other two establishments are distressed by the inadequate supply of fresh fish and the way fresh fish are transported. Again, neither firm has any suggestions concerning supply; but one respondent proposes that fresh fish not only reach the inland seller sooner, but also in better condition.

2. Frozen Fish

Three of the major line wholesalers report "other" problems in handling frozen fish, while ten evidently do not have any problems. Two of the three mention breakage and/ or damage to frozen fish. Both propose frozen fish (foreign and domestic) be inspected carefully by the processor or government inspectors, and handled more gently by haulers. The third wholesaler points to packaging problems. The packages do not protect the product adequately, nor do they hold up well in handling or in transit.

B. Minor Line Wholesalers

1. Fresh Fish

The only minor line wholesaler who distributes fresh fish mentions high price and poor quality as his major non-spoilage problems. He proposes the supply be increased by offering greater assistance to fishermen. In addition, he thinks the quality can be improved by establishing standards and grading the fish accordingly.

2. Frozen Fish

Relatively speaking, more minor line wholesalers mention other problems with frozen fish than do the major line wholesalers. The problems are identified as: breakage (three wholesalers); poor quality (two wholesalers) and thawing in the retail store (one wholesaler). To resolve the breakage and poor quality problems, the respondents propose that: the processors inspect and control their products better; the processors insist that frozen fish be handled more carefully from processing plant to distributor; and quality standards and compulsory grading be imposed. To get around the thawing of frozen fish in the retail store, the wholesaler who mentions this problem suggests retailer stock the fish in the lower part of their open freezers.

C. Summary

Five of the 11 wholesalers offering fresh fish identify other problems in handling this product. Two mention the high cost of direct labor in processing whole fish; but neither offer any suggestions to resolve the problem. Three wholesalers are concerned about inadequate supply, as well as the transportation and poor quality of fresh fish. One respondent thinks the supply should be increased by offering more inducements to fishermen. Compulsory inspection and grading is suggested as a means of improving quality, while faster movement of fresh fish to inland distributors is proposed to overcome the transportation problem.

Eight of the 24 wholesalers selling frozen fish note other problems. Six of the eight mention breakage and/or poor quality. One thinks packaging is poor, while another says retailers handle frozen fish incorrectly, thereby letting it thaw. To control breakage and/or poor quality, the wholesalers suggest: processor's improve their quality control program; those handling the product in transit do so more carefully; and quality standards and compulsory grading of foreign and domestic fish be adopted. Better, stronger packages would obviously resolve the packaging problem. Lastly, to prevent frozen fish from thawing in open refrigerator cases in retail stores, the frozen fish should be stocked in the bottom of the case.

TABLE 16

OTHER PROBLEMS [NONSPOILAGE] HANDLING FISH AND POSSIBLE SOLUTIONS

Wholesalers	Form of Fish & Problems		Possible Solutions
	Fresh	Frozen	
Major Line			
A-1	None	Damaged clams, oysters	Ship carefully, inspection
A-2	Direct labor	None	N/A
A-3	None	None	
A-4	None	None	
C-1	-	None	
C-2	Direct labor	Packaging	N/A
C-3	-	None	
C-4	Supply & transp	None	N/A
C-5	None	None	
C-6	-	Breakage	Better shipping, inspection
C-7	None	None	
C-8	None	None	
C-9	Supply & transp	None	Faster shipping, handling, control
Minor Line			
A-5	-	None	
A-6	-	None	
A-7	-	None	
A-8	-	Breakage	Better control by supplier
A-9	-	-	
A-10	-	None	
C-10	High price, quality	Poor quality	Increase supply, establish quality grades
C-11	-	Quality, breakage	Better control grading
C-12	-	Breakage	More careful handling along line
C-13	-	None	
C-14	-	None	
C-15	-	Thawing in retail store	Store in lower part of freezer

Source: Survey Data.

XIX. UNDERUTILIZED SPECIES

Because popular species of fish are either depleted or shielded from depletion by international harvesting quotas, lesser known species must be utilized if the sea is to provide additional protein for people. In order to determine the marketability of such fish, a list of 13 underutilized species was shown to the wholesalers. The list, incidentally, was drawn up with the aid of personnel associated with the Market Research and Services Division, National Marine Fisheries Service. Wholesalers were asked: [1] if they recognized each specy; [2] whether or not they could sell it profitably; and [3] their reasons for not handling the fish. The species, along with a summary of the wholesalers' replies, is contained in Table 17.

A. Recognition of Species

Curiously, the species fall into three groups by degree of recognition. Silver hake, pollock and mackerel constitute the first group. They are familiar to all wholesalers who responded (22) to this question. In the second group are sea herring, Northern shrimp, and butterfish. These species are recognized by all but two to four respondents. The species in the third group - the least recognized category - are Pacific cod, white hake, skate, dogfish, tanner crab, calico scallops, and ocean quahog. If the nonrespondents are truly nonrespondents because they, too, are unfamiliar with these species, then approximately 50 per cent of the wholesalers know little or nothing about Pacific cod, white hake, skate, dogfish, tanner crab, calico scallops, or ocean quahog.

B. Profitable Sales Possibilities

The species clustered into five categories according to respondents' replies as to whether or not they could be sold profitably. In category one, 55 per cent of the respondents indicate they could sell mackerel profitably, while 52 per cent say silver hake could be a profitable specie. All agree silver hake should be sold in frozen form. There is a difference of opinion concerning mackerel, however. Five wholesalers believe canned mackerel can be sold, five favor fresh mackerel, and two frozen mackerel.

Whereas 50 per cent or more of the respondents in the first category think the species could be handled profitably, only 33 to 38 per cent of the wholesaler respondents think the species in the second category might be profitable. The species in this group are pollock (38 per cent), sea herring (37 per cent), and butterfish (33 per cent). Most respondents who view the species as profitable suggest pollock should be sold in frozen form, butter fish in fresh form, and sea herring as a canned item.

In the third category, 22 to 25 per cent of the respondents report they could sell the species profitably. The particular species in category three are ocean quahog (25 per cent), white hake (25 per cent), and Pacific cod (22 per cent). All agree that ocean quahog should be sold in fresh form and Pacific cod as frozen fish. Most also think white hake should be marketed in frozen form.

The fourth category contains species whose sales are considered profitable profitable by 15 to 17 per cent of the respondents. Tanner crab (17 per cent), Northern shrimp (16 per cent), and skate (15 per cent), are in this group. All respondents think tanner crab should be frozen, while two-thirds say Northern shrimp should be sold in frozen form, and skate in fresh form.

The species in the fifth category are calico scallops and dogfish. None of the respondents believed they could handle dogfish profitably, and only one wholesaler feels calico scallops could be offered profitably in fresh form.

C. Reasons for Not Handling the Species

The prime reason given by wholesalers for not handling lesser utilized species is lack of consumer demand. This is mentioned twice as often as all of the other reasons combined.

Far below lack of consumer demand, the characteristics of various species are mentioned as the second reason for not handling these fish. Pollock, for example, is too dark; dogfish is too small; sea herring is too boney; butterfish spoils rapidly and discolors; tanner crab is poorly shelled, while Pacific cod is highly perishable. Similarly, silver hake has a poor taste; pollock is too strong; Northern shrimp is tasteless; and mackerel has an odd flavor.

Again, far below the previous category of unfavorable characteristics of the species, the third reason for not handling these fish is the fact that silver hake, skate, sea herring, and white hake are hard to get, according to some wholesalers.

The fourth reason offered by a few wholesalers is "cheap" fish. Silver hake, mackerel, skate, and butterfish are categorized this way by five wholesalers.

Lastly, four wholesalers report they do not handle Northern shrimp or calico scallops because they are too expensive.

D. Summary

Silver hake, pollock and mackerel are familiar to all respondents. Sea herring, Northern shrimp and butterfish, in turn, are also familiar to all but a few respondents. The least familiar species are Pacific cod, white hake, skate, dogfish, tanner crab, calico scallops, and ocean quahog. If the nonrespondents are viewed as nonrespondents because they are unable to recognize the species, approximately 50 per cent of the wholesalers are unfamiliar with the latter species. If the goal is to utilize the underutilized species, a massive education campaign must be conducted not only among consumers, but also among distributors. It is necessary to generate a push for these species at the wholesaler level, as well as a pull at the consumer level.

Silver hake and mackerel are the two species that over 50 per cent of the respondents report they can sell profitably. Approximately 35 per cent of the respondents regard pollock, sea herring, and butterfish as profitable products, while only 25 per cent look at ocean quahog, white hake, and Pacific cod favorably. Similarly, about 16 per cent of the respondents think tanner crab, skate, or Northern shrimp are profitable items. No one considers dogfish worth handling, and only one wholesaler considers calico scallops as a potentially profitable fish. Because it has become a more popular specie, silver hake is now under quota. This illustrates the need for caution. As an underutilized specie becomes popular, it must be protected before it becomes extinct. Clearly, the task is one of popularizing underutilized species in general, rather than one specie in particular. Wholesaler distributors, consequently, must participate in this popularization if they desire a greater supply of fish to sell.

Lack of consumer demand is the prime reason given by wholesalers for not handling the under-utilized species.

The unfavorable characteristics of some of the species is reported as the second reason, although far below the prime reason, according to number of times mentioned. Once again, there is the problem of who is responsible for stimulating the demand for the under-utilized species, as well as explaining the characteristics of the different species to overcome possible objections. Although the wholesalers are willing to handle a specie if profitable, they seem to harbor the belief that they have no responsibility to popularize the specie, thereby making it profitable.

TABLE 17
WHOLESALERS' FAMILIARITY AND OPINIONS OF SALES POTENTIAL OF SELECTED UNDER-UTILIZED SPECIES

Specy	Could Sell Profitably-						Specy Unfamiliar	Reasons for Not Handling
	Yes				No Opinion	No Reply		
	Fresh	Frozen	Canned	No				
Silver Hake (Whiting)	-	11	-	10	-	4	-	No demand(5)poor flavor(2) cheap fish(2)can't get(1)
Pollock	1	7	-	13	-	4	-	No demand(6)strong flavor(3) too dark(2)can't give away(2)
Northern Shrimp	1	2	-	15	3	4	3	No demand(7)tasteless(3) too expensive(2)
Ocean quahog	5	-	-	15	1	4	9	No demand(6)
Mackerel	5	2	5	9	1	3	-	No demand(6) flavor(2) cheap(1)
Skate	2	1	-	17	-	5	8	No demand(5)cheap(1) only Italians buy(2)can't get(1)
Dogfish	-	-	-	16	4	5	8	No demand(5) small(1)
Sea Herring	2	-	5	12	2	4	2	No demand(6) boney (4) can't get(2)
Butterfish	5	2	-	14	-	4	4	No demand(5)too perishable(2) discolors(2) too cheap(1)
White Hake	1	4	-	15	1	4	7	No demand(4) can't get(2) must sell as cod(2)
Tanner Crab	-	3	-	14	3	5	8	No demand(4)poorly shelled(2)
Calico scallops	1	-	-	15	4	5	8	No demand(5)too costly(2)
Pacific Cod	-	4	-	14	3	4	7	No demand(5) too costly(2) too perishable(1)

Source: Survey Data.

XX. WHOLESALERS' SUGGESTIONS TO IMPROVE THE MARKET FOR FRESH FISH

The wholesalers' responses to the question, "What can be done to improve the market for fresh fish?" are categorized into six groups representing supply, advertising, display, processing, price, and other suggestions. These are given below, along with the suggestions put forth in each category. The figures in brackets at the end of each statement indicate the number of times the suggestion was made by the respondents.

A. Supply

1. Increase the amount of fresh fish available [5].
2. The U. S. Government should control foreign fishing in the Grand Banks and U. S. territorial waters. Foreigners are stripping the fishing ground clean and running our fishermen out of business [4].
3. The U. S. Government should provide more money to modernize the fishing fleet [3].
4. The U. S. Government should fight for strong international control of fish conservation practices [2].
5. Provide large subsidies for fresh fish farming programs [2].
6. The U. S. Government ought to control pollution and stop the mercury scares that put people out of fishing because they can't sell the fish [2].

B. Advertising

1. Get the fishing industry together and establish associations or cooperatives to promote fish by telling the people the truth about mercury and the healthful qualities of fish instead of scaring them [5].

2. Provide better distribution of government pamphlets on how to prepare and cook fish [2].

3. Make everyone handling fish advertise it. Retailers, especially, should advertise fish as much as they do meat or chicken [2].

4. Advertisers should use TV more, as well as special discount coupons [2].

C. Display

1. Put fish in "special spot" cases, located preferably at the end of an aisle [7].

2. Give more display space to fish [2].

3. Use the model displays developed by the National Fisheries Institute [2].

4. Make fresh fish eye appealing with parsley, celery, and so forth [1].

D. Processing

1. Develop better, stronger packaging to keep fish fresh longer [2].

2. Processors should use the better boneless techniques now available [1].

3. Package fresh fish more by the piece rather than by the pound [1].

E. Price

1. Lower the price of fresh fish to increase sales [15].

2. Impose price control to stabilize prices, assure fair return, and stop cut-throat competition [1].

F. Other Suggestions

1. Improve the labor situation. Young men are not joining the fishing fleets, and processors can't find people who will work for them [3].

2. Get the government out of the mercury problem [2].

3. Establish compulsory grading and use it to control quality [2].

4. Organize cooperative groups to stop cut-throat competition and eliminate the pressure leading to shoddy practices [1].

5. Ship fresh fish faster and provide better schedules [1].

6. Stop trying to push fresh fish sales. It's self-defeating when supply is so scarce, and it's a dying business anyway [3].

G. Summary

The largest number of responses is found in the supply category, indicating that this is the factor of greatest concern reported by the wholesalers. It is interesting to note that they believe action by the Federal government is the primary means to overcome the shortage of fresh fish. The actions they suggest vary from tighter control of foreign fishing in the Grand Banks and larger subsidies for fishermen to cessation of mercury scares that put fishermen out of work.

Wholesalers are almost equally concerned about the price of fresh fish. Fifteen of 16 respondents believe it should be lowered to increase sales. One respondent proposes that price controls be imposed. The way to overcome high price in the long run, of course, is to increase the supply of fresh fish (the wholesaler's prime concern) or reduce the demand in terms of per capita consumption. A reduction of per capita consumption, needless to say, is unpalatable to the wholesalers. Perhaps supply could be increased by utilizing the under-utilized species. Based on the previous section of this monograph, however, it is evident that wholesalers are generally disinterested in handling these species until a strong consumer demand is discernible.

Advertising and display both rank third in terms of suggestions generated. A substantial number of respondents suggest the fishing industry launch an advertising campaign to tell the people the "truth" about fish. It is further suggested that everyone handling fish advertise it. Better distribution of government pamphlets describing how to cook fish, as well as more use of TV advertising are also proposed. At the retail level, the wholesalers propose fish be displayed more prominently, especially in "special spot" cases located at the end of aisles.

The fewest number of suggestions concern processing. Utilization of better packaging, better deboning techniques, and sales by the piece instead of by the pound are put forth.

The suggestions in the "all other" category vary widely. Heading the list are: the difficulty of attracting young people to work in the fishing industry, and the suggestion that proponents stop pushing fresh fish since it is a "dying business any way." Among the other proposals are suggestions that: the government get out of the mercury problem; compulsory grading and quality control be instituted; fresh fish be shipped more rapidly on better schedules; and the formation of cooperative groups to reduce the pressure leading to shoddy practices in the industry.